Configuration Manual

Cordless Phones DT69X/DT390

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1 Introduction

This document is a guide for installing, configuring and maintaining functionality of the DT690, DT692 and DT390 cordless phones.

The DT69X/DT390 can be used straight away in your system but it is highly recommended to install the Windows Portable Device Manager (WinPDM) or the Centralized Portable Device Manager (CPDM3). This enables customization of the behaviour of the phone to suite each user profile and the specific PBX used in the system (MX-ONE, BP and MD-E).

WinPDM is aimed for smaller sites where the phones are within reach. The CPDM3 makes it possible to administrate the phones centrally via a web interface without the need to collect the phones.

It is recommended that the reader has basic knowledge of the Aastra system and basic knowledge of subscribing phones to the PBX.

1.1 Abbreviations and Glossary

CPDM3	Centralized Portable Device Manager An application running on an ELISE3 module, that enables wireless services to and from portable devices and chargers.
DECT	Digital Enhanced Cordless Telecommunications: global standard for cordless telephony.
Device Manager	PDM system version running on an CPDM3, for management of handsets, charging racks, etc
DT69X	Relates to DT690 and DT692.
ELISE3	Embedded LInux SErver: A hardware platform used for CPDM3.
IPDI	International Portable DAM identity DAM(DECT Authentication Module) see IPEI for more information
IPEI	International Portable Equipment Identity IPEI/IPDI is needed to enable network subscription of the phone. At delivery of the phone, IPEI and IPDI are the same and either can be used for network subscription. If one phone is replaced with another using the Easy replacement procedure the IPDI will be exchanged and IPEI and IPDI will no longer be the same. If the IPEI and the IPDI differ, the IPDI shall be used for network subscription.
PBX	Private Branch Exchange (MX-ONE, BP and MD-E): Phone system within an enterprise that switches calls between local lines and allows all users to share a certain number of external lines.
Unite	Generic term for messaging system that unites different systems, for example System 900, System 9d, and teleCARE M.
User ID	User ID identifies the set of user parameters possible to save and administrate via WinPDM or CPDM3. It can be moved together with user parameters between phones. It is normally set automatically at DECT subscription to be equal to call number.
WinPDM	Windows Portable Device Manager

1.2 Functionality

The following matrix shows which functionalities that can be used by the different telephones and require settings via WinPDM/CPDM3.

Functions	DT390	DT690	DT692
Company phonebook	x	x	x
Central phonebook	-	x	x
Personalized menus	x	x	x
Audio adjustment (side tone etc.)	x	x	x
Custom sounds	-	x	x
Messaging (text size etc.)	-	x	x
Voice Mail	x	x	x
Push Button Alarm	-	-	x
Automatic Call after Alarm	-	-	x
Acoustic Location Signal (ALS)	-	-	x
Poll Location[a]	-	-	x
Base Station Location	-	-	x
Base station encryption	x	x	x
Upload Language	x	x	x
Clear lists in charger	-	-	x
Services	x	x	x
Emergency call number	x	x	x
Own/User headset profile	x	x	x
Own line settings	x	x	x
PBX absence date format	x	x	x

a.Base Station Location must be enabled to use this feature.

2 Getting started with Configuration of the DT69X/DT390 Phone

It is possible to configure the DT69X/DT390 Phone by inserting it into a deskt PDM charger or Rack PDM charger. The charger is connected via USB or ethernet to WinPDM or the Device Manager in CPDM3

In case of IP-DECT, it is possible to configure the handset over the air.

This chapter describpes how to configure handsets in three different setups:

- With WinPDM
- With Device Manager via chargers
- With Device Manager over -the air

2.1 WinPDM

WinPDM runs on a PC. The phone is configured via WinPDM as follows:

- Connect a Desk PDM charger or a Rack PDM Charger via USB to the computer running WinPDM.
- Start WinPDM.
- Place the phone in this charger which shall be connected to WinPDM. The telephone can either be turned off or turned on when placing it in the charger. A telephone that is turned off will start up automatically and the battery charging symbol will be displayed.

For instructions on how to use WinPDM, see *Installation and Operation Manual, WinPDM*.

2.2 Device manager in CPDM3

The CPDM3 runs on an ELISE3 module.

- Connect a Desk PDM charger or a Rack PDM Charger via the Ethernet port to the network.

  The charger is by default configured to connect to the network using DHCP. If DHCP is not used in the network, connect each charger via USB to WinPDM and configure a static IP address. Enter the IP address of the CPDM3 into the PDM charger. The PDM charger will contact CPDM3 and communicate with the CPDM tool in the CPDM3. Please note that the USB port has priority over the Ethernet port and has to be disconnected to be able to use the Ethernet port on the charger.
- Start the CPDM3.
- Place the handset in the charger that is connected to the CPDM3. The telephone can either be turned off or turned on when placing it in the charger. A telephone that is turned off will start up automatically and the battery charging symbol will be displayed.
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For instructions on how to use the CPDM3, see *Installation and Operation Manual, CPDM3*.

3 Installation of Phones

This chapter gives an introduction on how to configure handsets using CPDM3. The instructions in this chapter describes some basic work flows. The work flows can be altered by, for example, using the CPDM3 wizards to a greater extent.

The chapter also describes how to add a charger in CPDM3, since a PDM charger is required for configuring handsets using CPDM3.

For detailed information on how to work with PBX extensions, see the documentation for each extension type. For detailed information on procedures performed from handsets, see User Guide Aastra DT390 Cordless Phone or User Guide Aastra DT690/ DT692 Cordless Phones.

How to configure a handset depends on the type of DECT system:

- DECT (integrated DECT)
- IP DECT (SIP)

The procedures for the different types of systems are described below.

It is recommended to use the CPDM3 to install and maintain phones in a large system. The reason is that it enables to install, upgrade and configure a large amount of phones simultaneously. Another benefit is that the collection of the phones from the user is not needed. They can be maintained while placed in network connected Desk PDM Chargers on the users desks. Network connected Rack PDM Chargers can also be used, or over the air in the case of IP-DECT.

WinPDM enables administration of phones inserted in a Desk PDMCharger or Rack PDM Charger connected via USB to the administrator's computer.

For WinPDM, see *Installation and Operation Manual, WinPDM* or *Installation and Operation Manual,* CPDM3.

3.1 **Preparing WinPDM or** Device Manager for handling of DT69X/ 390

If the parameter definition file (*.def*) for the handset is not present in the WinPDM or CPDM3, it can be added by following the procedure below. The parameter definition file and software files are delivered as a package file with the extension *.pkg*. Note that template files (.tpl) may also be included in a package file.

1 Open the WinPDM or the Device Manager.

2 In the *File* menu, select Import > Packages.

3 Select the package and click "OK".

The package will imported and the files will be created; one definition file with the extension *.def* and one software file with the extension *.bin*. Template files may also be created. File extensions are further explained

File extensions are further explained in an appendix in *Installation and Operation Manual, WinPDM* and *Installation and Operation Manual,* CPDM3.

3.2 t.**Adding a Charger in CPDM3**

A charger must be added in CPDM3 before handsets can be configured.

Follow the steps below to add a charger in CPDM3:

1 Open CPDM3 and Device Manager.

2 Connect a desktop or rack charger to the network. The Found new hardware wizard is opened in CPDM3.

3 In the wizard, select "Store in database" and click OK.

4 The charger is now added in CPDM3. Since it is stored in the database, the charger is visible in CPDM3 even when disconnected from the network.

5 Open the Numbers tab and double-click the charger.

6 Configure the charger as mentioned in charger. 2.2.

3.3 Configuring Handsets in DECT Systems (Integrated DECT)

In a DECT system, each handset corresponds to a DECT extension in the PBX. The handsets and PBX communicates using DECT base stations connected to the PBX.

Configuring handsets in a DECT system comprises the following steps:

- Creating DECT extensions (including authorization codes and the IPEI codes of the handsets) in the PBX.
- Subscribing the handsets to the PBX, using the authorization codes and, if applicable, the PARK code.
- Adding the handsets in CPDM3 using one of the following procedures:
  - New handset, new number
  - New handset, existing number
  - Existing handset, new number
  - Several new handsets, new numbers
- Configuring the handsets, manually or using a template.

3.3.1 New Handset, New Number

Adding a new handset with a new number in a DECT system comprises the following steps:

1 Create a DECT extension (including an authorization code and the IPEI code of the handset) in the PBX.

2 From the handset, subscribe the handset to the PBX using the authorization code of the created DECT extension.

After subscription the handset is ready for making and receiving calls. To be able to manage handset settings and firmware using CPDM3, the handset must be added in CPDM3.

3 Open CPDM3 and Device Manager.

4 Place the handset in a desktop or rack charger connected to CPDM3 over the LAN. The *Found new hardware* wizard is opened. (For information on how to connect chargers to CPDM3, see “t.Adding a Charger in CPDM3” on page 4.)

5 In the wizard, select "Do nothing" and click OK.

6 Open the “Devices” tab and verify that the handset is online.

7 Right-click the handset and select “Assign number”. (Assigning a number to a handset is a one-step procedure for both creating a number in CPDM3 and associating a handset to this number).

8 In the “Assign number to device” dialog box, enter the directory number of the DECT extension created in step 1. (Even though CPDM3 is not a part of the communication between the handset and the PBX, it is highly recommended that the handset number in CPDM3 corresponds to the directory number of the DECT extension created for the handset. If not, the handset will be displayed using different numbers in CPDM3 and the PBX.)

9 Configure the handset. For information on how to configure handsets, see “Phone Configuration” on page 15.

3.3.2 New Handset, Existing Number

When adding a new handset to an existing number in a DECT system, an existing DECT extension in the PBX and handset number in CPDM3 is used.

Adding a new handset using an existing number comprises the following steps:

1 In the PBX, change the IPEI code for the existing DECT extension (or re-initiate the DECT extension) so that it corresponds to the IPEI code of new handset.

2 From the handset, subscribe the handset to the PBX using the authorization code of the created DECT extension.

3 Open CPDM3 and Device Manager.

4 Place the handset in a desktop or rack charger connected to CPDM3 over the LAN. The *Found new hardware* wizard is opened.

5 In the wizard, select “Do nothing” and click OK.

6 Open the “Device” tab and verify that the handset is online.

7 Open the “Numbers” tab

8 In the list, select the number to associate with the handset.

9 On the Number menu, select “Associate with device...”.

10 Select the handset and click OK.

11 Configure the handset. For information on how to configure handsets, see “Phone Configuration” on page 15.

3.3.3 Existing Handset, New Number

When adding a new number to an existing handset in a DECT system, a new DECT extension in the PBX and handset number in CPDM3 is created.

Adding a new number to an existing handset comprises the following steps:

1 Create a DECT extension (including an authorization code and the IPEI code of the handset) in the PBX.

2 Open CPDM3 and Device Manager.

3 Place the handset in a desktop or rack charger connected to CPDM3 over the LAN. The *Found new hardware* wizard is opened.

4 In the wizard, select “Do nothing” and click OK.

5 Open the “Device” tab and verify that the handset is online.

6 Open the “Numbers” tab.

7 Create a new number in CPDM3 (it is highly recommended to use the same number as the created DECT extension). For more information, see “*Create New numbers”*.

8 In the list of available numbers, select the created number.

9 On the Number menu, select “Associate with device...”.

10 Select the handset and click OK.

11 Configure the handset. For information on how to configure handsets, see *Configuration Manual, DT69X/DT390*.

3.3.4 Several New Handsets, New Numbers

When adding several new handsets with new numbers in a DECT system, the procedure in CPDM3 can be simplyfied by adding a range of numbers and then associating the numbers with a selection of handsets.

Adding several new handsets with new number comprises the following steps:

1 Create a range of DECT extensions (including authorization codes and the IPEI codes of the handsets) in the PBX.

2 From the handsets, subscribe the handsets to the PBX.

3 Open CPDM3 and Device Manager.

4 Place the handsets in a desktop or rack charger connected to CPDM3 over the LAN. The *Found new hardware* wizard is opened.

5 In the wizard, select “Do nothing” and click OK.

6 Open the “Device” tab and verify that the handset is online.

7 Create a set of numbers, see “ *Create New Numbers*”, in *Installation and Operation Manual,* CPDM3.

8 Associate the numbers with the handsets according to “*Associate Numbers with a device”* in *Installation and Operation Manual, CPDM3*

9 Configure the handsets. For information on how to configure handsets, see “Phone Configuration” on page 15.

3.4 Configuring Handsets in IP DECT (SIP) Systems

In an IP DECT (SIP) system, each handset corresponds to an IP extension in the PBX. The handsets and PBX communicates using IP DECT base stations connected to the PBX oven the LAN.

Configuring handsets in an IP DECT (SIP) system comprises the following steps:

- Creating IP extensions in the PBX.
- Creating users (including authorization codes and the IPEI codes of the handsets) using the user interface of the IP DECT base station.
- Subscribing the handsets to the PBX, using the authorization and PARK codes.
- Adding the handsets in CPDM3 using one of the following procedures:
  - New handset, new number
  - New handset, existing number
  - Existing handset, new number
  - Several new handsets, new numbers
- Configuring the handsets, manually or using a template.

3.4.1 New Handset, New Number

When adding a new handset with a new number in an IP DECT (SIP) system, an IP extension in the PBX, a user in the IP DECT user interface, and a handset number in CPDM3 is created.

Adding a new handset with a new number in an IP DECT (SIP) system comprises the following steps:

1 Create an IP extension in the PBX.

2 In the IP DECT base station user interface, add a new user including a number that equals the directory number of the created IP extension, an IPEI code for the user’s handset, and an authorization code. For information on how to add users in IP DECT base stations, see *Installation and Operational Manual, IP DECT Base Station*.

3 From the handset, subscribe the handset to the IP DECT base station using the authorization code created in step 2.

After subscription the handset is ready for making and receiving calls. To be able to manage handset settings and firmware using CPDM3, the handset must be added in CPDM3.

4 Open CPDM3 and Device Manager.

5 Place the handset in a desktop or rack charger connected to CPDM3 over the LAN.The *Found new hardware* wizard is opened.

6 In the wizard, select “Do nothing” and click OK.

7 Open the “Device” tab and verify that the handset is online.

8 Right-click the handset and select “Assign number”. (Assigning a number to a handset is a one-step procedure for both creating a number in CPDM3 and associating a handset to this number).

9 In the “Assign number to device” dialog box, enter the directory number of the DECT extension created in step 1. The function “Easy registration” as described in Chapter 3.4.5 uses this number. It is therefore important that it corresponds to a valid free number in MX-ONE Configure the handset. For information on how to configure handsets, see “Phone Configuration” on page 15.

3.4.2 New Handset, Existing Number

When adding a new handset to an existing number in an IP DECT (SIP) system, an existing IP DECT extension in the PBX and handset number in CPDM3 is used.

Adding a new handset using an existing number comprises the following steps:

1 In the IP DECT base station user interface, change the IPEI code for the number so that it corresponds to the IPEI code of the new handset.

2 From the handset, subscribe the handset to the IP DECT base station using the user’s authorization code (defined in the IP DECT base station).

3 Open CPDM3 and Device Manager.

4 Place the handset in a desktop or rack charger connected to CPDM3 over the LAN. The *Found new hardware* wizard is opened.

5 In the wizard, select “Do nothing” and click OK.

6 Open the “Device” tab and verify that the handset is online.

7 Open the “Numbers” tab

8 In the list, select the number to associate with the handset.

9 On the Number menu, select “Associate with device...”.

10 Select the handset and click OK.

11 Configure the handset. For information on how to configure handsets, see “Phone Configuration” on page 15.

3.4.3 Existing Handset, New Number

When adding a new number to an existing handset in an IP DECT (SIP) system, a new IP DECT extension in the PBX and handset number in CPDM3 is created.

Adding a new number to an existing handset comprises the following steps:

1 Create an IP extension in the PBX.

2 In the IP DECT base station user interface, add a new user including a number that equals the directory number of the created IP extension, an IPEI code for the user’s handset, and an authorization code. For information on how to add users in IP DECT base stations, see *IP DECT Base Station, Installation and Operational Manual*.

3 From the handset, subscribe the handset to the IP DECT base station using the authorization code created in step 2.

4 Open CPDM3 and Device Manager.

5 Place the handset in a desktop or rack charger connected to CPDM3. The *Found new hardware* wizard is opened.

6 In the wizard, select “Do nothing” and click OK.

7 Create a new number in CPDM3 (it is highly recommended to use the same number as the created IP extension). For more information, see “Create New Numbers” on page 55.

8 In the list of available numbers, select the created number.

9 On the Number menu, select “Associate with device...”.

10 Select the handset and click OK.

11 Configure the handset. For information on how to configure handsets, see “Phone Configuration” on page 15.

3.4.4 Several New Handsets, New Numbers

When adding several new handsets with new numbers in an IP DECT (SIP) system, the procedure in CPDM3 can be simplified by adding a range of numbers and then associating the numbers with a list of handsets.

Adding several new handsets with new number comprises the following steps:

1 Create IP extensions in the PBX.

2 In the IP DECT base station user interface, add new users including numbers that equals the directory numbers of the created IP extensions, IPEI codes for the users’ handsets, and authorization codes. For information on how to add users in IP DECT base stations, see *IP DECT Base Station, Installation and Operational Manual*.

3 From the handsets, subscribe the handsets to the IP DECT base station using the authorization codes created in step 2.

4 Open CPDM3 and Device Manager.

5 Place the handsets in a desktop or rack charger connected to CPDM3. The *Found new hardware* wizard is opened.

6 In the wizard, select “Do nothing” and click OK.

7 In CPDM3, create a set of numbers according to “*Create New Numbers*” in *Installation and Operation Manual,* CPDM3.

8 Associate the numbers with the handsets according to “*Create New Numbers*” in *Installation and Operation Manual,* CPDM3.

9 Configure the handsets. For information on how to configure handsets, see “Phone Configuration” on page 15.

3.4.5 Handset Installation in IP-DECT System using Easy Registration

A handset can subscribe to an IP-DECT system automatically if the following are fulfilled:

- The IP-DECT system is configured for Easy Registration, see the Installation and Operational Manual for your IP-DECT system.
- The handset extension number and IPEI are registered in the IP-DECT system, see the Installation and Operational Manual for your IP-DECT system.
- The handset is not subscribed to any systems.
- The handset software is version 3.5.6 or higher.

Subscribe

Select the package and click “OK”.

1 If needed, switch off the handset by pressing the On-Hook key.

2 Switch on the handset by pressing On-hook key.

3 Select language to be used by or press “CancelIf Cancel is pressed, the default language (English) will be used. If Cancer n the File menu, select Import > Packages.

4 The handset starts to search for IP-DECT systems and will subscribe to the system when it is found.

During the subscription procedure, the handset,User ID will automatically be set to the same as the extension number. The User ID is used to identify the handset when it is connected to WinPDM/Device Manager and will be visible in the Number column.

Tip: The User ID can be viewed in the handset by navigating to the menu:
Admin menu > Device info > User ID.

4 Maintenance

4.1 Definitions

In the replacement descriptions, the phones are defined as:

- “old phone” is the phone to be replaced, possibly damaged but still working
- “new phone” is the replacement phone that will get the settings used in the old phone

4.2 Upgrade phone software

It is possible to upgrade or reinstall the software on a phone. When upgrading the software of the phone, any data (for example, messages on a DT690) may be deleted.

See also *Installation and Operation Manual, WinPDM*, or *Installation and Operation Manual,* CPDM3.

1 Open WinPDM or the Device Manager in the CPDM3.

2 Open the *Devices* tab and select the phone you want to upgrade/reinstall.

3 Make a right-click and click “Upgrade...”.

4 A list of software files with a “*.bin*” extension will be presented under “Available software”. Select the desired software file and click “OK”.

4.2.1 Download times during upgrade of handset software

The software will now be downloaded to the handset. The following table shows the approximately download times for handset when done over-the-air (OTA) in an IP-DECT system, or via charger in a DECT system.

OTA via IPBS	**DC4 Charger connected to Device Manager via Ethernet**	**DC4 Charger connected to PDM via USB.**
approx. 25 min.	approx. 9 min. 20 sec.	approx. 9 min. 30 sec.

The software download capacity depends on call traffic stated below. The table below is not applicable for DC4 charger connected to WinPDM since IPBS or CPDM3 is not needed.

Table 1. Download times during calls

IPBS	0-4 simultaneous downloads depending on call traffic as follows:	
	No. of calls	No. of possible simultaneous downloads
	0	4
	1	3
	2	2
	3	1
	4 >	0
Device Manager	Max. 10 simultaneous downloads (max. 20 when using an external web server).	

4.3 Perform a Factory reset

When a factory reset is done on a phone, all configuration settings will be restored to default values, PBX subscriptions will be removed and all data are removed. This includes contacts, messages etc. The software will be left intact.

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Factory Reset using WinPDM

1 In WinPDM, click the *Device* tab and mark the telephone to be factory reset. Note that the telephone must be online.

2 In the *Device* menu, select “Factory reset”. Alternatively, right-click the telephone and select “Factory reset”.

3 A *Reset devices* dialog appears, click “Yes”. The telephone will be restarted.

Factory Reset using the phone

It is possible to factory reset a phone from its Admin menu.

1 To activate the Admin Menu, enter the Call time screen and press > * < < * <.

2 Select “Factory Reset”.

3 A *Reset portable?* dialog appears, press “Yes”. The telephone will be restarted.

4.4 Replacement procedure choice guide

Depending on situation, two different replacement procedures can be chosen; replacement via WinPDM/CPDM3 and Easy Replacement. Use the following list as a guide to choose which procedure to use.

- If a phone needs to be replaced due to for example a broken display, the Easy Replacement procedure can be used. See *User Manual, Cordless Phone DT390,* or *User Manual, Cordless Phones DT690/692.*

- If the electrical connection is damaged, it might not be possible to follow the Easy Replacement procedure. Depending on fault, it might work to do a replacement via WinPDM/CPDM, see 4.5 *Replacement of phone with the Device Manage (CPDM3)* on page 12 or 4.6 *Replacement of the phone with WinPDM* on page 13.
- If two phones and their settings shall be switched between two users, follow 4.5 *Replacement of phone with the Device Manage (CPDM3)* on page 12 or 4.6 *Replacement of the phone with WinPDM* on page 13.

4.5 Replacement of phone with the Device Manage (CPDM3)

Both the old phone and the new phone must be of the same device type (DT690, DT692 or DT390). The same extension number is assigned to the new phone.

Make sure that the old phone is saved in the Device Manager. Start the Device Manager in the CPDM3 and navigate to the “Numbers” tab. There shall be a tick in the “Saved” column for the old phone.

If the phone is not saved, insert it into a desktop charger or rack charger connected to Device Manager and perform a save, see *Installation and Operation Manual, CPDM3*.

If it is impossible to save the old phone settings, stop the replacement procedure. Instead unsubscribe the old phone from the PBX, register the new phone and follow the instructions for installing a phone.

When the phone is saved, unsubscribe the old phone from the PBX.

The following steps are described in two different scenarios, check which one suits the best before proceeding.

4.5.1 Data included in replacement transfer

The following data is replaced during a replacement with Device Manager:

- User parameters (including User ID)
- Contacts

Note that the following data is *not* replaced:

- DECT registration
- Call list
- Messages
- Bluetooth pairing list
- Company phonebook
- Downloaded Language

4.5.2 Phone replacement with Device Manager (CPDM3), Scenario 1

Note: The phone to be installed must not have any previous valid registrations. If it has a valid registration, unsubscribe the phone or use Scenario 2.

1 Unsubscribe the old telephone (integrated DECT). If the unsubcribtion cannot be performed in the phone, unsubscibe it via the IP-DECT interface. See corresponding IP- DECT documentation.

2 Subscribe the new phone with the same extension number as the old phone. During the subscription procedure, the CPDM3 identity (User ID) will automatically be set to be the same as the extension number.

Note: The User ID can be viewed in the phone by navigating to the menu Admin menu > Device info > User ID

3 Insert the phone into a desktop charger or rack charger connected to Device Manager (not needed if an over the air connection is used). Navigate to the Numbers tab in CPDM3 Device Manager.

The new phone now has the same User ID as the old phone. It will automatically be synchronized and data and parameter settings from the old phone will be transferred to the new phone.

The synchronization will take a while if the Contacts in the original phone contains a large number of contacts.

4.5.3 Phone replacement with Device Manager (CPDM3), Scenario 2

1 Make a note of the IPDI of the new phone. It is found by pressing *#06# on the phone.

2 Insert the new phone into a desktop charger or rack charger connected to the CPDM3 and navigate to the Numbers tab in the Device Manager in CPDM3.

3 Select the old phone in the list and make a right-click. Click “Associate with device...”. Select the device with an IPDI that matches your new phone from the list that appears.

The new phone is automatically synchronized and all data and parameter settings will be transferred to the new phone.

The synchronization will take a while if the Contacts in the original phone contains a large number of contacts.

4 Subscribe the new phone. The subscription procedure is described in the cordless phone user manual. During the subscription procedure, the phone’s user ID will automatically be set to be the same the extension number.

4.6 Replacement of the phone with WinPDM

To see which data that is replaced during this process, see 4.5.1 *Data included in replacement transfer* on page 12.

Both the old phone and the new phone must be of the same device type (DT690, DT692 or DT390). The same extension number is assigned to the new phone.

The new phone should not be subscribed towards the PBX yet.

1 Perform a factory reset, see 4.3 *Perform a Factory reset* on page 11, if the new phone has been previously used.

2 Make sure that the old phone is saved in WinPDM by starting PDM and navigating to the Numbers tab. There shall be a tick in the “Saved” column for the old phone.

If the phone is not saved, insert it into a desktop charger or rack charger connected to WinPDM and perform a save.

Note: If it would be impossible to save the old phone settings, stop this replacement procedure. Instead register the new phone and follow the instructions for installing a phone, see 3.2 *Installation of a new Phone* on page 4.

The following steps are described in two different scenarios, check which one suits the best before proceeding.

4.6.1 Phone replacement with Win-PDM, Scenario 1

3 Unsubscribe the old telephone (integrated DECT). If the unsubcribtion cannot be performed in the phone, unsubscibe it via the IP-DECT interface. See corresponding IP- DECT documentation.Subscribe the new phone with the same extension number as the old phone. During the subscription procedure WinPDM identity (User ID) will automatically be set to be the same as the extension number.

Note: The User ID can be viewed by navigating to the menu Admin menu > Device info > User ID.

4 Insert the new phone into a DeskPDM charger or Rack PDM charger connected to WinPDM.

5 A pop-up dialogue appears, asking the user to decide whether to use the Number settings in PDM or the Number settings in the device. Select PDM.

The phone will automatically be synchronized and all data and parameter settings will be transferred to the new phone. The synchronization will take a while if the Contacts in the original phone contains a large number of contacts.

Note: If subscribing towards an IP-DECT system, the IP-DECT software version must be 3.1.X or higher. If not, use Scenario 2.

Note: The phone to be installed must not have any previous valid registrations. Unsubscribe phone or use Scenario 2.

4.6.2 Phone replacement with WinPDM, Scenario 2

1 Insert the new phone into a desk PDM charger or Rack PDM charger connected to WinPDM.

2 A pop-up will be displayed. Select the option “Associate with number”. Follow the instructions and select the number of the old phone, see *Installation and Operation Manual, WinPDM*.

The phone will automatically be synchronized and all data and parameter settings will be transferred to the new phone. The synchronization will take a while if the Contacts in the original phone contains a large number of contacts.

3 Subscribe the new phone.

4.7 DECT Frequency Band Configuration

Note: The frequency band configuration is only needed if other frequencies than *EU US China* shall be used. Additionally, if the handset has been returned from repair, the applicable frequency band might be set again.

In order to change the operating frequency band, the following preconditions must be fulfilled:

- The frequency is set to “Not initiated”. This can be checked by entering the Admin menu, see 6 *Administration* on page 25 follow the path: Admin menu > Device info > Hardware. Scroll down to “Frequency band”.
- The phone must not have a DECT registration. If it already has, perform a Factory reset, see 4.3 *Perform a Factory reset* on page 11.

1 Enter the Admin Menu, see 6 *Administration* on page 25.

2 Select “Frequency band” and select the desired band.

- EU US China (default)
- LA (Latin America)
- Brazil
- 1900-1920 MHz
- Multifrequency

3 Restart the telephone.

4 Register the telephone.

5 The frequency band option will no longer be available.

Note: The selection is persistent and will stand a factory reset.

4.7.1 Multiple Frequency Support

The handset can be used in a system that changes frequency by selecting ,"Multifrequency” as frequency band in the handset. See *4.7 DECT Frequency Band Configuration*. This setting is applicable for handsets used in different regions of the world. For example for users working on a ship that visits different countries.

When the frequency band is set to “Multifrequency”, the handset will adopt to the applicable frequency band (EU, US or Brazil) used in the specific region after it has been restarted.

NOTE: The handset will adopt to the frequency band configured in the DECT system.

The recommended procedure when changing frequency band is as follows:

1 The site administrator sends out broadcast message to all handsets informing that the handsets need to be restarted at a specific time.

2 The site administrator enters IP-DECT master and change setting for the frequency and carriers just before the specific time.

3 All handset users restart their handsets.

After the restart the handsets have changed to the applicable frequency band (EU, US or Brazil).

5 Phone Configuration

Note: This chapter describes settings in parameter definition files (.def). These files are regularly updated and settings may change slightly. For example “On” to “Enable” or a parameter can be moved to another directory.

5.1 Configure a Phone with a Template

Note: Ask your supplier for example templates valid for DT69X/DT390 and your PBX.

It is possible to select a phone in WinPDM/CPDM3 and directly change one or more configuration parameters. It is recommended to use a template to apply configuration changes to phones. A template contains one or more parameter settings. By using a

template, the same configuration can easily be applied to many phones simultaneously. Templates are also an efficient way to get good control over which changes that are applied to each phone.

Templates enables configuration of all aspects of a phone from sound volume to keypad shortcuts.

Your supplier can provide example templates for different PBX:s. The phone will have full functionality towards the PBX even without such a template. By using such a template, though, the phone will be customized for that PBX with menu options for PBX specific functions such as Callback.

5.1.1 Create a template

1 Open WinPDM or the Device Manager in the CPDM3.

2 Select the *Templates* tab and open the menu “Template > New...”. The *Create Template* window is opened.

3 Select the device DT69X/DT390 and parameter version that matches the software version installed on the phone. Give the template a descriptive name.

The parameters that are not part of the template will be left unchanged on the phone.

The parameter version of an installed phone is visible under the “Numbers” tab or the “Devices” tab.

4 Tick the checkbox of each parameter that you want to be part of this template and enter the proper value.

5 Click “OK” to save your template.

5.1.2 Apply a template

1 Open WinPDM or the Device Manager in the CPDM3

2 Open the *Numbers* tab and select the phones you want to apply the template to.

3 Right-click and select “Run template...”.

Only templates with a parameters version matching the selected phones will be shown. Select the template you want to apply and click “OK”.

4 The template is applied. The number of parameters in the template will affect the the time it takes to apply the template to the selected phones.

When looking at a phone under the *Numbers* tab, the column “Last run template” will show the name of the most recently applied template.

5.1.3 Save a phone configuration as a template

It is possible to save all settings of a phone as template. Please note that this does not include contacts and other personal data. The template will only contain configuration data.

This template can be used as a backup if your want to restore the configuration of the phone at a later stage or as a template that can be applied to a number of phones.

1 Some parameters are user specific. If it is decided to apply this type of template to several phones, it is recommended to exclude the following parameters:

- Owner ID - A text string specified in the idle display. The parameter is located directly under “Settings”.
- Phone lock PIN code - The security code used to unlock the keypad. The parameter is located under Settings > Locks.

2 Open WinPDM or the Device Manager in the CPDM3.

3 Open the *Numbers* tab and select the phone you want to save as a template.

4 Make a right-click and select “Use as a template...”. Enter a descriptive name for the template.

5 The *Edit template* window is opened. By default, all parameters are selected and are saved when clicking on “OK”.

If one or more parameters should be excluded, remove them by clearing the checkbox next to the parameter.

6 Click “OK”.

5.1.4 Synchronizing a phone with WinPDM/CPDM3

After installing and saving a phone, it will be synchronized each time it is connected to WinPDM. The synchronization transfers parameter changes between the phone and WinPDM and vice versa as follows:

- If a parameter has been changed in the phone, it will be transferred to WinPDM/CPDM3.
- If a parameter has been changed in WinPDM/CPDM3 while the telephone was disconnected, it will be transferred to the phone.

If the same parameter has been changed in both WinPDM/CPDM3 and the phone, the value in WinPDM/CPDM3 will be transferred to the phone.

5.2 Voice Mail

In some systems it is needed to assign the phone number of the Voice Mail service. The parameter can be set specifically for each PBX subscription on the phone and is accessed from Systems > System x > PBX Settings > Numbers. “System x” is replaced with the subscription (System A - System H) that is configured.

5.3 Wildcard characters in voice mail phone numbers

When programming voice mail dial strings in PDM/Device Manager it is possible to use a wildcard character, N, to represent the phone’s extension number.

For example, a PBX uses voicemail numbers that are a combination of a base voicemail number and the phone’s extension number. If the base voicemail number is 2222 and the extension number is 4455, the voicemail number is 22224455. Using the N wildcard character this can be written as:

2222N

5.4 Central Phonebook

If the system is equipped with a messaging server with a phonebook service, the Central Phonebook on that server can be accessed from the phone. The number to be used is set to default 999999. It can be changed by editing parameters in a Number or a template.

If the system is not equipped with a Central Phonebook, this menu option can be removed from the phone by entering an empty value for the corresponding parameter.

The parameter can be set specifically for each PBX subscription on the phone and is accessed from Systems > System x > PBX Settings > Numbers. "System x" is replaced with the subscription (System A - System H) that is configured.

5.5 Company Phonebook

It is possible to create a phonebook that is administered centrally and uploaded to the phone from WinPDM/CPDM3. If this feature is used, entries from Contacts and Company Phonebook are merged. The Company Phonebook entries are locked and cannot be edited in the phone.

1 Create a Company phonebook file, see Create Company phone book file..

2 Import the Company phonebook file to PDM/CPDM3, see the corresponding Installation and Operation Manual.

3 Upload the company phonebook file to the handset(s) via WinPDM/CPDM3, see *5.4.2 Upload a company phonebook file*.

5.5.1 Create a company phonebook file

The company phonebook file (.cpb) is normally created from an Excel file using a script to extract the information and create the company phonebook file (.cpb). The Excel file, "Company Phonebook.xls" is delivered from your supplier.

The format of the rows in the phonebook file is:
<Name><tab><phone number>
followed by additional rows for each entry.

The phone supports a maximum length of 24 characters in each field, additional characters are truncated when the phonebook file is created. The following characters are accepted in the phone number field in the phonebook file, but are ignored when the phonebook file is created: ( ) - and " "(space).

Phonebook files created for DT590 may be used, but an additional field may be included after the "phone number" field in the file. The information in this field is ignored in the phone from the user point of view. The extra information limits the number of entries that can be saved in the phone and the file may be to big to be uploaded to the phone.

5.5.2 Upload a company phonebook file

In WinPDM or the Device Manager in the CPDM3, go to the devices tab and select device(s). In the Device menu, select Upload phonebook.

See also *Installation and Operation Manual, WinPDM*, or *Installation and Operation Manual,* CPDM3.

5.5.3 Delete Company phone book entries

Company phonebook entries in a handset can be deleted by downloading an empty company phonebook file to the handset.

5.6 Import Contacts

It is possible to create a contact file that is administered centrally and uploaded to the telephone from WinPDM/Device Manager.

5.6.1 Create a Local Phonebook File

The contact file is created by using an Excel file provided by your supplier.

5.6.2 Upload a Local Phonebook File

Note: When uploading a local phonebook file, local phonebook entries (if any) in the telephone will be replaced by the entries in the file.

1 In WinPDM or the Device Manager in the CPDM3, go to the *Numbers* tab and select telephone(s).

2 In the *Number* menu, select Import contacts > From file.

3 Select the file to be imported and click "Open".

5.7 Call Services

Call services is a configurable menu in the phone. The purpose of the call services menu is to provide a user friendly access to system dependent functionality such as absence handling and call diversion.(see 5.8 *Absence Handling*) and Call Diversion (See 5.7 Call Diversion)

The menu is described in *User Manual, Cordless Phones.*

Besides the default Call services functions, it is possible to define 10 extra system specific call services by codes. The codes can be programmed with pause (P) and auto disconnection (H). Both Name and Data must be defined for the option to be displayed. Possible values: Digits 0-9, #, *, 'P' ,- pause, H ,- hook, and U[1] ,- the handset prompts for user input with the possibility to enter numerical characters (procedure call).

Using WinPDM and the "Edit template" feature, the parameter can be found at Systems > Common > Call Services > General Service X

Note: Your supplier may have a template example that will configure the call services menu for the PBX.

5.7.1 Activate/Deactivate Call Services when Changing Profile

Note: Applicable for DT690/DT692 only.

It is possible to activate/deactivate a Call service when changing profile in the handset. This feature can for example be used to send feature access codes (for example *21*) to the system when the handset changing profile.

1 If needed, configure the Call services to be used for the profiles, respectively. See *5.6 Call Services*.

2 Select User Profiles > User Profile X (where X represents 1 - 4).

3 Select Presence and diversion > Call services.

4 In the *When activated* and *When deactivated* drop lists, select the Call services to be used when the profile is activated and deactivated.

TIP: It is possible to activate a profile when placing a handset in a charger, See 5.14 Set action when phone is placed in charger

1.Applicable for DT692 only.

5.8 Call Diversion

It is possible to configure user friendly call diversion menus in the telephone using PDM/CPDM3. These menus can then be selected in the telephone by selecting Calls > Call services > Divert calls. It is for example possible to divert calls to another number configured in the PBX when receiving a call.

Beside the default call diversion menus, it is possible to define 10 extra system specific services codes, see *5.6 Call Services*.

1 Select Systems > System *X* (where *X* represents A - H).

2 Select PBX Settings > Diversion.

3 Select Internal or External; enter the following:

- Prefix - the system specific prefix code to be used (if required by the PBX used)
- Suffix - the system specific code required to activate the diversion (for example "*21*")
- Cancel - the system specific code required to deactivate the diversion (for example "#23#").

5.9 Absence Handling

It is possible to configure user friendly absence menus in the telephone using PDM/CPDM3. These menus can then be selected in the telephone by selecting Calls > Call services > Absence. This menu is used to set the reason why a call cannot be answered, for example when you are in a meeting. The caller will be notified about the absence reason when he/she calling.

Beside the default absence menus, it is possible to define 10 extra system specific services codes, see *5.6 Call Services*.

1 Select Systems > System *X* (where *X* represents A - H).

2 Select PBX Settings > Absence.

3 Select "Common codes", enter the following:

- Activation prefix - the system specific activation prefix code required to activate the absence (for example **23**)
- Activation suffix - the system specific activation suffix code required to activate the absence (for example #)
- Deactivation - the system specific code required to deactivate the absence (for example "#23#").
- PBX date format for user input - the PBX supported date format to be sent to the PBX when activating an absence reason containing a date (for example "Vacation"). The date in the telephone is always entered in *MMDD* format. If the parameter is set to *DDMM*, the telephone will automatically convert to correct date format.

4 Select "Lunch", "Meeting", "Trip", "Vacation", "Out" and/or "General absence X"; enter the following:

- Activation code - the system specific absence code for a certain absence reason, for example *0**.
- Name - enter name of absence reason (only for General absence). The name will be visible in telephone.
- User input - specifies if time or date is required for the absence reason (only for General absence).

5.10 In Call Menu

In Call Menu is a configurable menu in the phone. The purpose of the In Call Menu is to provide a user friendly access to system dependent functionality during a call such as:

- Start a new call during a conversation
- Switch between calls
- End a call
- Transfer a call
- Transfer to a new call
- Make a conference call
- Activate call back
- Open Messaging menu (DT690/DT692 only)
- Sending call waiting

The menu is described in *User Manual, Cordless Phone DT69X with Bluetooth*, and *User Manual, Cordless Phone DT390*.

The programming of the menu is done with WinPDM or the Device Manager in the CPDM3. For instructions on how to work with WinPDM, see *Installation and Operation Manual, WinPDM*, or *Installation and Operation Manual,* CPDM3.

Ask your supplier for example templates that will configure the in call menu for your PBX.

5.11 Configure Own In Call Functions

Besides the default In call functions, it is possible to define 10 extra system specific call services by codes. The codes can be programmed with digits 0-9, #, *, P – pause, H – hook (auto disconnection).

1 Select Systems > System X > PBX Settings > In call functionality > General purpose X.

2 In the *Name* field, enter the name to be displayed in the In Call menu.

3 In the *Data* field, enter the applicable code to be used for the function.

4 Click "OK" to save the settings.

Tip: Your supplier may have a template example that will configure the In call functions menu for the PBX.

5.12 Own Line Settings

Use the own line settings when it is desired to use the same phonebook in different systems and in different countries.

The own line settings enables:

- Calling numbers stored with a "+" sign for the international access code. The same phonebook can be used in different countries.
- Recognizing incoming internal or external calls as numbers stored on international format in the phonebook. The same phonebook can be used in different systems.

In order for this feature to work, numbers must be stored in the phonebook in international format with a "+" sign for the international access code. Also, the Own Line parameters must be configured with WinPDM/CPDM3. For instructions on how to work with WinPDM/CPDM3, see *Installation and Operation Manual, WinPDM* or *Installation and Operation Manual,* CPDM3.

5.13 Uploadable language

It is possible to upload *one additional* language to the phone. The language file is generated via an Excel file. The Excel file used to generate language files is delivered from your supplier.

Note: If another language file is uploaded, the first additional language is overwritten.

Certain special characters are allowed when generating the language file, see information in the Excel file.

To upload an additional language, WinPDM or the Device Manager in the CPDM3 is used, go to the devices tab and select device(s). In the Device menu, select Upload language.

A parameter can be altered to match the uploaded language. The parameter controls:

- The characters available for text input
- The sort order in the phonebook.

This parameter is only used when Language is set. The Parameter can be found in the "Settings" folder.

See also *Installation and Operation Manual, WinPDM* or *Installation and Operation Manual,* CPDM3.

5.14 Customize the GUI

This feature is included in DT690 an DT692 only.

It is possible to customize the phone Graphical User Interface (GUI) by turning certain menues On or Off. This is done in WinPDM/CPDM3 by editing a template (or a Number setting) for the corresponding portable (or Number).

The path to these settings in the template depends on the version of the parameter definition file (.def). In the current version the path is:

Customization > Visibility > X

where "X" can be Messaging, Favourites, etc.
The parameters are found under "X".

The settings for the parameters may have three alternatives, such as:

- Show
- Hide
- Read only (All settings can be viewed but not modified by the phone user)

5.15 Show/Hide Missed Call Window

Note: This feature is applicable for DT690 and DT692 only.

A missed call is by default indicated by a Missed call window. It is possible to hide this window and is recommended if a user has, for example, both a handset and a mobile.

Example:

If configured in the PBX, an incoming call to the handset can either be answered using the handset or mobile. If the user answers the call using the mobile, the Missed call window will not be displayed in the handset.

1 Select Settings > Answering.

2 In the Show missed calls popup drop-down list, select "No" to hide the Missed call window.

5.16 Configure Handset Restrictions

Note: This features are applicable for DT690 and DT692 only

5.16.1 Enable/Disable Mute Function

It is possible to prevent that the handset is muted by a user.

1 Select Customization > Phone restrictions

2 In the *Possible to turn off sound* drop-down list, select one of the following:

- Yes - The mute restriction is disabled.
- No - The user will not be able to mute the handset or set the ring volume to silent.

5.16.2 Enable/Disable Switch Off Function

It is possible to prevent that the handset is switched off by a user.

1 Select Customization > Phone restrictions

2 In the *Prevent switch off handset* drop-down list, select one of the following:

- Yes - The user will not be able to switch off the handset by pressing the On-hook key.
- No - The switch off restriction is disabled.

5.16.3 Enable/Disable Call List

It is possible to prevent that the handset stores outgoing calls and incoming calls in the Call list. This can be useful to prevent that an unauthorized person views the call list.

1 Select Customization > Phone restrictions

2 In the *Possible to enable call list* drop-down list, select one of the following:

- Yes - The handset will store the calls in the Call list
- No - The handset will not store any calls in the Call list

Note: Old incoming and outgoing calls (if any) will not be deleted in the Call list when setting the parameter to No. It is recommended to clear all call lists (if any) to ensure that no old calls are stored.

5.17 Set action when phone is placed in charger

The phone can be configured to perform an action when it is placed in a charger. The selected action is only performed when no call is established. When the phone is removed from the charger, it returns to previous settings.

1 Select Connections > In Charger.

2 In the *In charger action* drop-down list, select one of the following:

- No action - no action will be performed when telephone is placed in charger
- Switch off - the telephone will be switched off when placed in charger
- Redirect - the telephone will redirect all calls and messages when placed in charger. **Note:** The destination number must be programmed in the PBX to be able to redirect calls/messages.
- Change profile[1] - the handset will change profile when placed in charger. In the *Change to profile* drop-down list, select the profile to be used. By default, only the profile Normal is selectable. If configured, additional profiles will be visible.

Sound off - the telephone will be silenced when placed in charger.

1.Applicable for DT690/DT692 only

5.18 Clear lists when inserted in charger

Note: this feature is applicable for DT692 only.

The phone can be configured to clear lists when placed in a charger. The following lists will then be cleared:

- Inbox
- Unsent
- Sent
- Call list
- Missed calls

Note: Both call lists and message lists will be cleared.

Using WinPDM/CPDM3 and the "Edit template" feature, the parameter can be found at
Connections > In_Charger > Clear_Lists_In_Charger
in a template or parameter definition file (.def).

The default setting for "Clear list in charger" is "Off". The feature is activated by changing the parameter value to "On". When the feature is enabled, the lists are cleared when the phone is placed in the charger.

5.19 Disabling of Homebase GAP Registration

When the feature is disabled, it is not possible to register to a home base.

Using the "Edit template" feature in WinPDM/CPDM3, the parameter is normally found at:
Systems > Home_Base_Subscription.

The parameter shall be set to "Enable" for registration on a new base station. The default value is "Disable".

5.20 Require Encrypted Base Station

The phone can be configured to establish calls via encrypted base stations only. This is used to avoid snooping in the telephony network.

Requirements:

- The encryption is enabled in the base station. See corresponding manual for the base station.
- If Aastra´s BS/IPBS base station is used, the software version must be 3.1.x or greater.
- The phone software version must be 2.9.7 or greater.

Using the "Edit template" feature in WinPDM, the parameter can be found at
Systems > Encryption required.

When the parameter is set to "Yes", it is only possible to establish calls via encrypted base stations. The default value is "No".

5.21 Base Station Location

Note: This feature is only applicable for DT692 and with CPDM3

An approximate location of the telephone is possible to sent along with an alarm. The telephone evaluates the field strength ratio of the individual radio Base Stations and sends the best-rated Base Station ID to indicate an approximate location of the telephone.

In addition, a system can also request the Base Station ID regardless if an alarm is sent or not. See *5.22 Poll Location*.

1 Select "Location".

2 In the *Base station positioning* drop-down list, select "On" to enable the positioning.

Note: The standby time for the telephone will be lower when Base station location is activated.

5.22 Poll Location

Note: This feature is only applicable for DT692 and with CPDM3

A system/application can request a location of a telephone. When location of the telephone is requested, the telephone sends its approximate location (*Base Station positioning* must be enabled, see *5.21 Base Station Location*). The telephone sends the best-rated Base Station ID together with the time since it was received.

5.23 Site Survey Tool

This feature is included in DT690and DT 692 only.

See *User Guide, Site Survey Tool*.

5.24 Alarm Settings

Note: This feature is applicable for DT692 only.

The parameters described in this chapter are applicable for all alarm types (that is Push-button Alarm and Test Alarm). See also *5.24.1 Push Button Alarm* for additional parameter settings.

In a template or Number in PDM/CPDM3, the parameters for activation are found at: Alarm > Common

Parameters in the current version are:

- Stored alarm data
  Determines which data to be sent along with an alarm.
- Password protect ALS
  Determines if a password is required to turn off the ALS
- Number for automatic call after alarm
  Determines which number the telephone automatically shall call after an alarm has been sent.

5.24.1 Push Button Alarm

It is possible to configure how alarms shall be handled in a system. An alarm can be activated by a user in two different ways:

- A single long press
- Multiple press

The following alarm types are handled:

- Push-button alarm
- Test alarm

In a template or Number in PDM/CPDM3, the parameters for activation are found at:

Alarm > Alarm on long press
Alarm > Alarm on multiple press

Parameters in the current version are:

- Alarm type for long press
  Test alarm, Push-button Alarm 1, or Push-button Alarm 2, or Not used.
- Alarm type for multiple press
  Test alarm, Push-button Alarm 1, or Push-button Alarm 2, or Not used.
- ALS[1]
- Mode for automatic call after alarm
  The call can be established in the following modes;
  - Normal: the call is established as an ordinary call.
  - Loudspeaking: the loudspeaker on the backside of the telephone is turned on.

See also 5.20 *Alarm Settings* on page 19 for additional parameter settings.

Information about the telephone's location can also be sent along with an alarm, see 5.21 *Base Station Location* on page 25.

5.25 Sound Settings for Calls

It is possible to set ring volume and ring signal for calls.

5.25.1 Set Ring Volume

1 Select Settings > Sound and Alerts.

2 In the *Ring Volume* drop-down list, select the ring volume to be used.

5.25.2 Set Ring Signal

1 Select Settings > Sound and Alerts.

2 In the *Internal Call*, *External Call*, and *Callback* drop-down lists; select the ring signal to be used for the incoming call, respectively.

Tip: It is possible to create own ring signals, see *5.25.3 Create Customized Ring Signals*

1.The ALS will not sound if an automatic call after alarm is established.

5.25.3 Create Customized Ring Signals

Note: This feature is applicable for DT690 and DT692 only.

It is possible to create custom sounds that can be used as ring signals. The ring signals must first be created before them can be selectable in *5.25.2 Set Ring Signal*.

Note: Custom sounds can also be used as message alerts. It is recommended to not use same sounds as ring signals and message alerts in order to distinguish them from each other. For more information how to use custom sound as message alert, see 5.26.1 *Configure Message Alerts with Beep Codes* on page 30.

1 Select Settings > Custom Sounds > Custom Sound X (where X represents 1 - 10).

2 Set the following parameters:

- Label - The name of the custom sound. The name will be visible when selecting the custom sound as ring signal later on.
- Melody - The text string representing a non-polyphonic sound. See also *Appendix A: Programming Custom Sound*.
- Beat - The tempo in beats per minute to be used when playing the sound.
- Style - The ratio of note to rest period to be used when playing the sound.
- Instrument - The instrument to be used when playing the sound.

3 If you want to use the custom sound as ring signal, follow the instructions in *5.25.2 Set Ring Signal*.

5.26 Messaging Settings

Note: This feature is applicable for DT690 and DT692 only.

It is possible to configure how incoming messages shall be indicated and displayed in telephone. The parameters can be found at:

Settings > Sound and Alerts

- Vibrate alert

  Determines if the handset shall vibrate when receiving incoming calls and messages.
- Message alert

  Determines the message sound for incoming messages. It is possible to select a predefined melody (Message 1 - Message 7) or a beep code that represents a certain sound. For more information on how to configure sounds with beep codes, see 5.26.1 *Configure Message Alerts with Beep Codes* on page 30.
- Message alert during call (DT692 only)

  Determines if a message alert should be played when receiving a message during a call.
- Message volume (DT692 only)

  Determines the message volume for incoming messages. By default, the message volume follows the ring volume, but another message volume can be set with this parameter.
- Vibrator for message during call (DT692 only)

  Determines if the handset shall vibrate when receiving messages during an ongoing call. The V*ibrate alert* parameter must also be enabled if the handset shall vibrate when receiving a message during the call.

Settings > Messaging

- Text size
  Size of the message text when viewing and writing messages.
- Message List representation
  Can be set to text or number.

5.26.1 Configure Message Alerts with Beep Codes

The telephone can map beep codes sent from a system/an application to different message alerts as follows:

Beep code sent from system/application	DT690 plays	DT692 plays
Beep code 0	No message alert is played	No message alert is played
Beep codes 1 - 6	2 beeps	1 - 6 beeps
Beep code 7	Siren	Siren

1 Select Settings > Sound and Alert.

2 In the Message alert drop-down list, select "Beeps according to beep code".

Enhanced beeps according to beep code.

Beep code sent from a system/application	The handset plays:
Beep code 0	No message alert is played
Beep codes 1 -3	1 - 3 beeps
Beep code 4	3 tones chime
Beep code 5	10 beeps
Beep code 6	Alarm sweep
Beep code 7	Siren

The handset will play extended message alerts that are mapped to the beep codes.

1 Select Settings > Sound and Alert.

2 In the Message alert drop-down list, select ,"Enhanced beeps according to beep code".

Custom sounds according to beep code

The handset can play customized message alerts that are mapped to beep codes. The message alerts must first be customized and then mapped to the beep codes.

3 **Tip:** It is recommended to use this feature if you want to create a message alert that sounds like the equipment (for example a respirator) that generates an alarm..

Beep code sent from a system/application	The handset plays:
Beep code 0	No message alert is played
Beep codes 1- 7	Corresponding Customized sound

Create Customized Sound

1 Select Settings > Custom Sounds > Custom Sound X (where X represent 1 - 10).

2 Set the following parameters:

- Label - The name of the custom sound (required). The name will be visible when mapping the custom sound to a beep code later on.
- Melody - The text string represents a non-polyphonic sound. By default, example of melodies are set for Custom Sound 1 - 7. See also Appendix A: *Programming Custom Sound* on page 39.
- Beat - The tempo in beats per minute to be used when playing the sound.

- Style - The ratio of note to rest period to be used when playing the sound.
- Instrument - The instrument to be used when playing the sound.

Map Beep Codes to Customized Sounds

1 Select Sound and Alerts > Custom Message Alert

2 In the Beep code drop-down lists, select the customized sounds to be used for respectively beep codes.

Enable Customized Sound

1 Select Settings > Sound and Alert.

2 In the Message alert drop-down list, select ,"Custom sounds according to beep code".

5.27 Protect registration from user deletion

It is possible to protect or unprotect a registration from deletion via the phone menu by altering the parameter “Protected flag”. In a template/Number in WinPDM/CPDM3, the parameter is found at:
Systems > System X > Registration data.

5.28 Emergency Call Number

This is a phone number for emergency calls. It is always possible to call this number, regardless of whether phone-lock or key-lock are active or not. The Parameter is found in a template/Number in WinPDM/Device Manager in the "Settings" folder.

5.29 Audio adjustment

It is possible to adjust the side tone level, i.e. how much of the speakers voice that is fed back to the speaker. The side tone level is set via WinPDM/Device Manager by adjusting the parameter:

Audio > Normal > Normal side tone adjustment

The parameter affects the “normal” mode, i.e. not wired headset, not Bluetooth headset and not the handsfree/loudspeaking mode.

For configuration of headset audio see, 5.30 *Headset configuration* on page 31.

Note: Changing this parameter may result in lower sound quality and high sound level. Evaluate carefully before applying.

5.30 Headset configuration

A headset is recommended if you frequently use the phone and/or want to have both hands free. The headset comes in two versions; microphone integrated in the cable, and microphone on a boom.

In order to achieve optimal audio quality with the different headset types, it is recommended to set the corresponding headset profile.

The default setting is "microphone on a boom", which means that the audio is optimized for using a headset with microphone on a boom. The headset profile can be changed in the phone menu or in a template/Number via WinPDM/CPDM3 in:

Connections > Headset > Headset type

If the preconfigured headset profiles does not match the headset or the audio performance is bad, it is possible to configure a headset profile. In WinPDM/CPDM3, this is done under:

Connections > Headset > Headset type > User headset profile

When a name has been configured for the profile it will be visible and selectable in the phone menu.

The following parameters can be set:

- microphone gain
- speaker gain

Note: Changing these parameters may result in a very high sound level which can cause hearing damage.

Note: Changing these parameters may result in lower sound quality such as noise and echo. If the audio problems occur, it is noticable for the person listening on the conversation. Evaluate carefully before applying.

5.31 Owner identification in the idle display.

It is possible to add owner identification in standby mode of the phone. In a template or Number in WinPDM/CPDM3, the parameter is found at:

Settings > Owner ID

Note: It is also possible to configure the Owner ID via the phone menu. See *User Manual, Cordless Phone DT690/DT692 with Bluetooth*.

5.32 Profiles

Note: This feature is included in DT690 and DT692 only

It is possible to set up an own profile for incoming calls, message alerts, vibrating alerts, key sound etc. This can be useful when there are many users on the same phone, and they want different sound profiles. It can also be used for temporarily settings, for example while in a meeting, incoming calls should be silent.

Profiles are configured via parameters in the "Profiles" folder.

Note: It is also possible to configure profiles via the phone menu. See *User Manual, Cordless Phones DT690 and DT692*.

5.33 Shortcuts

Note: This feature is included in DT690 and DT692 only.

It is for example possible to define the soft key to make a call. It is for example possible to define the soft key to make a call by selecting the Phone call function. When

configuring the Phone call function, the following values can be entered: Digits 0-9, #, *, P ,- pause,
H ,- hook, U[1] ,- the handset prompts for user input with the possibility to enter numerical characters before establishing a call (procedure call).

Shortcuts are configured via parameters in the "Shortcuts" folder.

Note: When programming Soft keys both name and function must be set.

Note: It is also possible to configure shortcuts via the phone menu. See *User Manual, Cordless Phones DT690 and DT692*.

5.34 My Favourites

Note:This feature is included in DT690 and DT692 only

It is possible to customize a personalized menu with functions that are used frequently. Examples of predefined functions that are available for My favourites are:

- Write new message
- Central phonebook
- Call contact

My Favourites are configured via parameters in the "My Favourites" folder.

Note: It is also possible to configure My Favourites via the phone menu. See *User Manual, Cordless Phone DT690 with Bluetooth*.

6 Administration

6.1 Admin Menu Tree

The phone has a hidden menu for system administrators. The Admin menu contains:

- Software and hardware information, IPEI/IPDI and User ID
- DECT link and system information
- Centralized Management status
- Site survey tool (Applicable for DT690 and DT692 only)
- Fault logging
- Enhanced system menu with ability to alter protection
- Frequency band selection (Hidden when frequency band has been set)
- Factory reset option

To activate the Admin Menu, enter the *Call time* screen and press > * < < * <.

1.Applicable for DT692 only

The following figure shows the menu tree for the Admin menu in DT690/DT692.

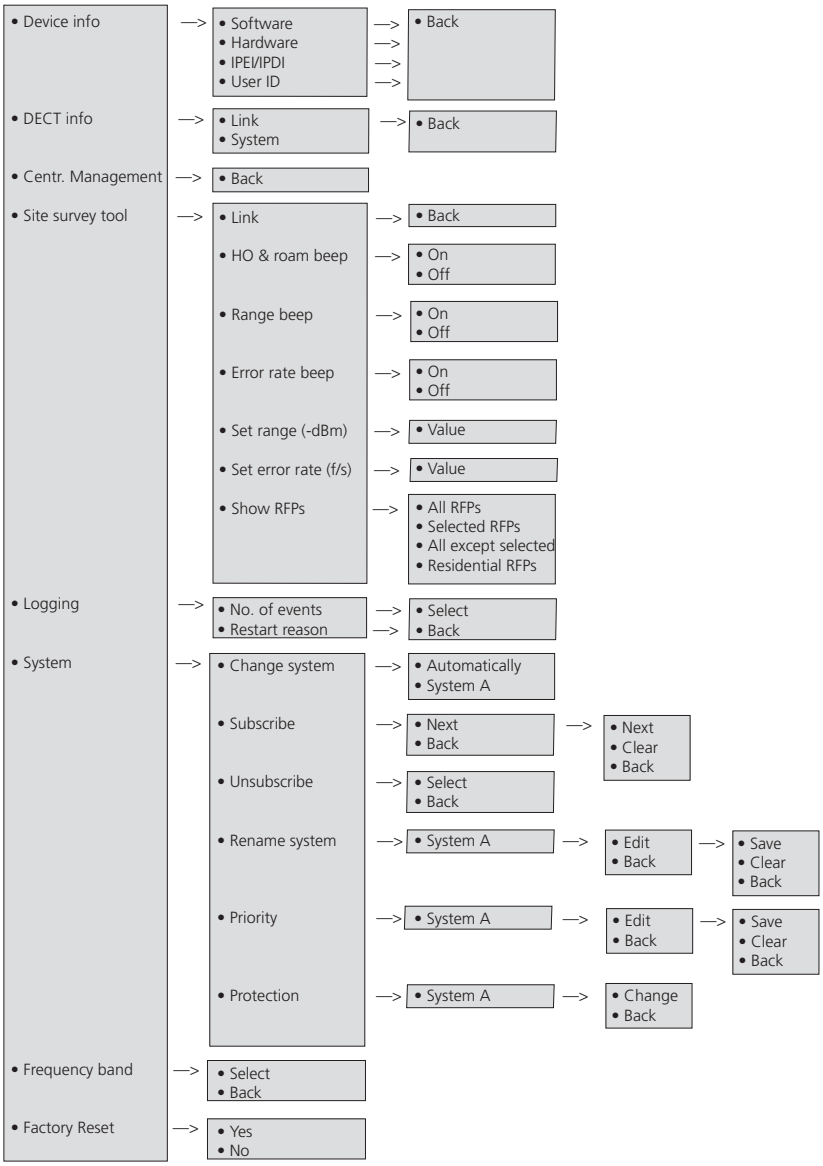

Figure 1. Admin Menu in DT690 and DT692.

Note: The menu choice "Site survey tool" does not exist in DT390.

Other menues are described in *User Manual, Cordless Phones DT690 and DT692 with Bluetooth*, and *User Manual, Cordless Phone DT390.*

6.2 Quick Access to the phone's Device Information

For quick access to device information, short codes can be used from the idle menu. To display this information, enter the following codes in the phone.

Information	**Code**
Software version	*#34#
Hardware version	*#34#

IPEI	*#34# or *#06#
IPDI	*#34# or *#06#
User ID	*#34#

6.3 LED indications

The following table shows the LED indications that are used for DT69X/DT390.

LED indication	Description
None	Switched off.
Green, fixed	Phone fully charged and in charger.
Green, flashing	Switched on, but not in charger.
Orange, fixed	Charging.
Orange, flashing (1000 ms on, 1000 ms off)	Software download.
Red, fixed	Software error. Service needed.

7 Troubleshooting

This section contains information on how to solve common operational problems, and information on warnings you may receive.

Go through the following lists if you encounter any problems. If this checklist does not solve the problem, contact the system administrator.

If other users have similar problems, there may be a system error.

7.1 Fault Symptoms

If any of the following fault symptoms occur, follow the instructions below.

Fault	Probable cause	Action or comment
The display stays dark	Low battery level or faulty phone.	Charge the battery. If the phone does not work after charging, contact the system administrator.

There is no ring signal	(1)The telephone is muted (2) Ring volume is set to silent (3) The telephone cannot play a customized ring signal. (4) Faulty telephone	(1) Press and hold the Mute button/Sound off key. (2) Increase volume (Settings > Sound & Alerts > Volume). (3) Check that the custom sound is correctly configured. Only the characters specified in *Appendix A: Programming Custom Sound* are supported. (4) Send the telephone for service.

7.2 Display Information

The following error messages can be shown in the phone display:

Display shows	Probable cause	Action or comment
No access	The phone is in range, but has no access rights.	Switch off the phone and then switch it on again. If this does not work, contact the system administrator.
No System. The phone beeps once a minute with a low tone followed by a high tone (during max 30 minutes). If the vibrator is enabled, it vibrates after the last beep.	The phone is out of coverage, or faulty phone.	The beeps can be stopped with the mute button. Then go into range. Note: When re-entering the coverage area it can take a couple of minutes before the phone automatically has registered into the system. If this does not work, contact the system administrator.
SERVICE NEEDED Parameters corrupt Note: This display message is only shown in English.	Faulty handset.	Select the reset option on the middle soft key and upgrade the phone's software to version 3.0.0 or greater. If this is not available or the problem persists send the handset for service.
SERVICE NEEDED Invalid IPDI Note: This display message is only shown in English.	Easy replacement procedure not followed correctly or failure during easy replacement procedure.	Send the handset for service.

Enter PIN code	Phone lock is activated.	Enter the required PIN code. If the PIN code has been lost, enter a new PIN code via WinPDM/CPDM3 or do a factory reset via WinPDM/ CPDM3.
Battery low, charge now	The battery level is low.	DT690/DT692: Charge the battery while it is in the phone, or remove the battery and replace, or charge it separately. DT390: Charge the battery while it is in the phone, or replace the battery.
Phonebook is not available at the moment.	The phonebook is not activated or does not respond.	Try again later or if the fault persists do a factory reset via the admin menu or via WinPDM/CPDM3. Note that it may take several minutes for the phonebook to be available if there are many entries in Contacts and/or company phonebook.
Voice mail number not defined	There is no Voice mail number defined in the phone.	Define a Voice mail number via WinPDM/CPDM3.
Could not encrypt connection	The parameter "Encryption Required" is enabled in the phone in combination with; 1) Unencrypted base station(s); and/or, 2) Unsupported base station(s).	1) Disable the "Encryption Required" parameter in phone; and/or, 2) Enable the encryption in the base station(s); and/or, **Note:** If Ascom's base station(s) is used, the software version must be 3.1.x or greater. 3) Use supported base station(s). Ask your supplier.

8 Related Documents

Battery Pack Rack Charger	22/1531-ANF 901 43
Desk PDM Charger	20/1531-ANF 901 43
Rack PDM Charger	21/1531-ANF-901 43
User Manual, Cordless Phone DT690/692	1424-EN/LZT 103 088
User Manual, Cordless Phone DT390	1424-EN/LZT 103 087
Installation and Operation Manual, WinPDM	12/1531-ANF 901 43
Installation and Operation Manual, CPDM3	19/1531-ANF 901 43
Site Survey Tool for DECT	33/1531-ANF 901 43

Appendix A: Programming Custom Sound

Before starting programming custom sound, it is recommended to have basic knowledge of notes.

The melody in a custom sound is represented by a text string consisting of several elements as follows:

Element		Subelement	Values
Note	>	Octave-prefix	*0 (A=55Hz) *1 (A=110Hz) *2 *3 *4 (default) *5 *6 *7 *8 (A=14080 Hz) If no octave prefix is added, the prefix *4 will be used.
		Basic notes	c d e f g a b
		Ess notes (flat notes)	&d &e &g &a &b
		Iss notes (sharp notes)	#c #d #f #g #a
		Duration	0 (Full-note) 1 (1/2-note) 2 (1/4-note) 3 (1/8-note) 4 (1/16-note) 5 (1/32-note)
Silence	>	Rest	r
		Duration	1 to 5 (1 = long pause, 5 = short pause)
		Duration specifier	. (Dotted note) : (Double dotted note) ; (2/3 length)
Vibration		N/A	Vibeon Vibeoff

Element	Subelement	Values
Repeat	N/A	@0 (repeat forever) @<number of repetitions>, for example: "@2" repeats the melody string 2 times.